

## Environmental Protection Agency

## § 86.1238-96

(6) Operate the vehicle according to the dynamometer driving schedule (§86.1215-85).

(7) At the end of the last deceleration, disconnect the exhaust tube from the vehicle tailpipe(s) and drive vehicle from the dynamometer.

### § 86.1237-96 Dynamometer runs.

Section 86.1237-96 includes text that specifies requirements that differ from §86.1237-85. Where a paragraph in §86.1237-85 is identical and applicable to §86.1237-96, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see §86.1237-85."

(a) The vehicle shall be either driven or pushed onto the dynamometer; however, if driven, the total time of engine operation during the 12 to 36 hour soak period shall not exceed 3 minutes, and the vehicle shall be driven at minimum throttle. The vehicle shall be stored prior to dynamometer operation in such a manner that it is not exposed to precipitation (e.g., rain or dew).

(b) [Reserved]. For guidance see §86.1235-85.

[58 FR 16061, Mar. 24, 1993]

### § 86.1238-96 Hot soak test.

(a)(1) *Gasoline- and methanol-fueled vehicles.* For gasoline- and methanol-fueled vehicles, the hot soak test shall be conducted immediately following the running loss test. However, sampling of emissions from the running loss test is not required as preparation for the hot soak test.

(2) *Gaseous-fueled vehicles.* Since gaseous-fueled vehicles are not required to perform a running loss test, the hot soak test shall be conducted within seven minutes after completion of the hot start exhaust test.

(b) The hot soak test may be conducted in the running loss enclosure as a continuation of that test or in a separate enclosure.

(1) If the hot soak test is conducted in the running loss enclosure, the driver may exit the enclosure after the running loss test. If exiting, the driver should use the personnel door described in §86.1207-96(a)(2), exiting as quickly as possible with a minimum disturbance to the system. The final hydrocarbon and methanol concentration for

the running loss test, measured in §86.1234-96(g)(1)(xx), shall be the initial hydrocarbon and methanol concentration (time=0 minutes)  $C_{HCl}$  and  $C_{CH_3OH}$ , for the hot soak test.

(2) If the vehicle must be moved to a different enclosure, the following steps must be taken:

(i) The enclosure for the hot soak test shall be purged for several minutes prior to completion of the running loss test. WARNING: If at any time the concentration of hydrocarbons, of methanol, or of methanol and hydrocarbons exceeds 15,000 ppm C the enclosure should be immediately purged. This concentration provides at least a 4:1 safety factor against the lean flammability limit.

(ii) The FID hydrocarbon analyzer shall be zeroed and spanned immediately prior to the test.

(iii) Fresh impingers shall be installed in the methanol sample collection system immediately prior to the start of the test, if applicable.

(iv) If not already on, the mixing fan(s) shall be turned on at this time. Throughout the hot soak test, the mixing fan(s) shall circulate the air at a rate of  $0.8 \pm 0.2$  cfm per cubic foot of the nominal enclosure volume.

(v) Begin sampling as follows:

(A) Analyze the enclosure atmosphere for hydrocarbons and record. This is the initial (time = 0 minutes) hydrocarbon concentration,  $C_{HCl}$ , required in §86.1243. Hydrocarbon emissions may be sampled continuously during the test period.

(B) Analyze the enclosure atmosphere for methanol, if applicable, and record. The methanol sampling must start simultaneously with the initiation of the hydrocarbon analysis and continue for  $4.0 \pm 0.5$  minutes. This is the initial (time=0 minutes) methanol concentration,  $C_{CH_3OH}$ , required in §86.1243. Record the time elapsed during this analysis. If the 4-minute sample period is inadequate to collect a sample of sufficient concentration to allow accurate GC analysis, rapidly collect the methanol sample in a bag and then bubble the bag sample through the impingers at the specified flow rate. The time elapsed between collection of the bag sample and flow through the